

GRAULEVY

BRANCH

***** SEC HGB-2

X1	14110.000	12.000	975.000	1010.000	1850.000	1850.000	1850.000	0.000	0.000	0.000
GR	50.000	675.000	47.400	775.000	45.100	875.000	44.400	975.000	42.000	996.000
GR	42.100	996.000	41.500	1000.000	41.800	1006.000	42.500	1010.000	43.700	1075.000
GR	44.900	1100.000	50.000	1160.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	9.000	385.000	385.000	385.000	385.000	0.000	130.000	305.000	385.000	785.000
ET	0.000	3.100	970.000	1040.000	0.000	0.000	0.000	0.000	0.000	0.000

***** TOPO SECTION

X1	18500.000	10.000	980.000	1030.000	4390.000	4390.000	4390.000	0.000	0.000	0.000
GR	53.000	0.000	50.000	900.000	47.000	980.000	40.000	985.000	39.000	998.000
GR	38.500	1002.000	39.500	1010.000	45.000	1030.000	50.000	1130.000	60.000	1770.000
QT	9.000	1020.000	1020.000	1020.000	1020.000	0.000	390.000	780.000	1020.000	1820.000
ET	0.000	50.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

***** SEC HGB-3

X1	19750.000	13.000	985.000	1015.000	1250.000	1250.000	1250.000	0.000	0.000	0.000
GR	50.300	845.000	48.800	895.000	48.600	945.000	48.000	965.000	44.900	985.000
GR	40.200	995.000	39.100	996.000	38.200	998.000	38.200	1003.000	39.200	1005.000
GR	40.200	1006.000	49.800	1011.000	51.300	1015.000	0.000	0.000	0.000	0.000

X1	19770.000	0.000	0.000	0.000	20.000	20.000	20.000	0.000	0.400	0.000
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X1	19800.000	0.000	0.000	0.000	30.000	30.000	30.000	0.000	0.400	0.000
QT	9.000	940.000	940.000	940.000	940.000	0.000	360.000	720.000	940.000	1870.000

***** SEC HGB-4

X1	21900.000	16.000	990.000	1008.000	2100.000	2100.000	2100.000	0.000	0.000	0.000
GR	73.200	900.000	66.600	943.000	61.000	956.000	53.400	976.000	53.700	990.000
GR	52.000	995.000	51.300	1000.000	51.600	1003.000	51.300	1006.000	53.600	1008.000
GR	53.400	1058.000	55.600	1088.000	60.500	1138.000	68.800	1196.000	70.400	1246.000
GR	72.300	1296.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

X1	22484.000	0.000	0.000	0.000	484.000	484.000	484.000	0.000	0.000	0.000
NC	0.000	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000

***** SEC HGB-5 (S-30)

X1	22434.000	19.000	996.000	1004.000	50.000	50.000	50.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	66.650	77.000	0.000
GR	85.000	750.000	34.000	755.000	71.800	830.000	61.800	890.000	63.000	930.000
GR	62.400	980.000	62.000	996.000	58.700	996.000	58.700	1003.990	62.500	1004.000
GR	62.900	1030.000	63.200	1080.000	64.100	1130.000	65.200	1153.000	70.400	1180.000
GR	72.100	1195.000	74.100	1205.000	79.400	1230.000	83.500	1263.000	0.000	0.000
SB	0.000	1.670	2.500	0.000	8.000	0.010	64.000	0.000	59.100	58.700

X1	22527.000	0.000	0.000	0.000	93.000	93.000	93.000	0.000	0.400	0.000
X2	0.000	0.000	1.000	66.900	78.600	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	78.800	82.000	0.000
BT	10.000	750.000	85.400	0.000	790.000	78.800	0.000	790.000	78.800	0.000
BT	805.000	78.900	0.000	905.000	79.900	0.000	996.000	81.700	66.900	1004.000
BT	82.000	66.900	1106.000	84.800	0.000	1155.000	86.000	0.000	1263.000	90.000

HEG2 RELEASE DATED NOV 76 UPDATED AUG 77

ERROR CORR - 01,02

MODIFICATION - 50,51,52,53

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

CRAWLEY BR #ELDON NC

SUMMARY PRINTOUT

SECNO	CWSEL	EG	ELMIN	ELLC	HV
12200.000	41.80	41.86	38.80	0.00	0.06
12200.000	42.90	43.01	38.80	0.00	0.11
12200.000	43.50	43.64	38.80	0.00	0.14
12200.000	45.00	45.22	38.80	0.00	0.22
12210.000	41.82	41.88	38.80	0.00	0.06
12210.000	42.92	43.03	38.80	0.00	0.11
12210.000	43.52	43.65	38.80	0.00	0.15
12210.000	45.02	45.24	38.80	0.00	0.22
12230.000	41.86	41.91	38.80	0.00	0.06
12230.000	42.96	43.07	38.80	0.00	0.11
12230.000	43.56	43.69	38.80	0.00	0.15
12230.000	45.06	45.28	38.80	0.00	0.21
12260.000	41.91	41.96	38.90	0.00	0.06
12260.000	43.02	43.13	38.90	0.00	0.11
12260.000	43.61	43.74	38.90	0.00	0.15
12260.000	45.12	45.34	38.90	0.00	0.22
12780.000	42.52	42.58	39.00	0.00	0.05
12780.000	43.74	43.81	39.00	0.00	0.07
12780.000	44.52	44.41	39.00	0.00	0.09
12780.000	45.52	46.06	39.00	0.00	0.15
14110.000	44.44	44.46	41.50	0.00	0.04
14110.000	45.62	45.67	41.50	0.00	0.05
14110.000	46.14	46.19	41.50	0.00	0.05
14110.000	47.74	47.80	41.50	0.00	0.05
18500.000	45.22	45.22	38.50	0.00	0.01
18500.000	46.85	46.86	38.50	0.00	0.02
18500.000	47.46	47.46	38.50	0.00	0.02
18500.000	49.57	49.42	38.50	0.00	0.04
19750.000	45.54	45.72	38.20	0.00	0.16
19750.000	47.31	47.68	38.20	0.00	0.37
19750.000	47.98	48.48	38.20	0.00	0.50
19750.000	50.04	50.71	38.20	0.00	0.66

SECNO	CASEL	EG	ELMIN	ELIC	HV
19770.000	45.56	45.78	38.60	0.00	0.22
19770.000	47.34	47.76	38.60	0.00	0.42
19770.000	48.01	48.58	38.60	0.00	0.56
19770.000	50.04	50.85	38.60	0.00	0.81
19800.000	45.62	45.87	39.00	0.00	0.25
19800.000	47.01	47.88	39.00	0.00	0.48
19800.000	48.10	48.73	39.00	0.00	0.63
19800.000	50.10	51.05	39.00	0.00	0.95
21900.000	54.72	55.02	51.30	0.00	0.31
21900.000	56.13	56.39	51.30	0.00	0.26
21900.000	56.88	57.12	51.30	0.00	0.24
21900.000	58.78	59.03	51.30	0.00	0.25
* 22384.000	60.30	60.90	57.30	0.00	0.60
* 22384.000	61.04	61.84	57.30	0.00	0.80
* 22384.000	61.34	62.30	57.30	0.00	0.96
* 22384.000	62.26	63.49	57.30	0.00	1.23
* 22434.000	62.67	64.67	58.70	0.00	2.00
* 22434.000	64.49	68.17	58.70	0.00	3.18
* 22434.000	66.10	70.02	58.70	0.00	3.92
* 22434.000	66.66	66.97	58.70	0.00	0.30
* 22527.000	63.25	65.08	59.10	66.90	1.82
* 22527.000	65.69	68.59	59.10	66.90	2.90
* 22527.000	69.84	71.70	59.10	66.90	1.86
22527.000	80.10	80.11	59.10	66.90	0.01
22580.000	65.47	65.49	58.60	0.00	0.02
22580.000	69.17	69.18	58.60	0.00	0.01
22580.000	72.07	72.07	58.60	0.00	0.00
22580.000	80.11	80.11	58.60	0.00	0.00
22680.000	65.50	65.51	58.30	0.00	0.01
22680.000	69.18	69.19	58.30	0.00	0.01
22680.000	72.07	72.08	58.30	0.00	0.00
22680.000	80.11	80.11	58.30	0.00	0.00

SUMMARY PRINTOUT

SECNO	CWSEL	QLOB	QCH	GRQB	VLOB	VCH	VRQB
12200.000	41.80	0.11	189.89	0.00	0.21	1.95	0.00
12200.000	42.90	2.60	452.29	0.11	0.47	2.71	0.12
12200.000	43.50	5.79	614.93	4.28	0.55	2.98	0.28
12200.000	45.00	23.64	1206.62	89.74	0.79	3.95	0.62
12210.000	41.82	0.12	189.88	0.00	0.21	1.93	0.00
12210.000	42.92	2.65	452.21	0.14	0.46	2.69	0.12
12210.000	43.52	5.86	614.64	4.50	0.55	2.96	0.29
12210.000	45.02	23.78	1205.23	90.99	0.79	3.93	0.61
12230.000	41.86	0.14	189.86	0.00	0.21	1.89	0.00
12230.000	42.96	2.76	452.03	0.22	0.46	2.65	0.14
12230.000	43.56	6.00	614.03	4.97	0.54	2.93	0.29
12230.000	45.06	24.06	1202.28	93.66	0.78	3.89	0.61
12260.000	41.91	0.11	189.88	0.00	0.21	1.94	0.00
12260.000	43.02	2.65	452.21	0.14	0.46	2.69	0.12
12260.000	43.61	5.83	614.76	4.41	0.55	2.97	0.29
12260.000	45.12	23.78	1205.24	90.98	0.79	3.93	0.61
12780.000	42.52	0.48	189.52	0.00	0.22	1.47	0.00
12780.000	43.74	9.31	447.28	3.41	0.40	2.15	0.21
12780.000	44.32	8.10	600.72	16.18	0.47	2.43	0.33
12780.000	45.92	28.56	1156.34	135.08	0.67	3.28	0.47
14110.000	44.44	0.00	117.60	52.40	0.00	1.89	0.57
14110.000	45.62	33.52	234.35	142.13	0.36	2.26	0.71
14110.000	46.14	72.75	287.57	189.67	0.45	2.36	0.75
14110.000	47.74	286.46	489.35	384.18	0.64	2.75	0.86
18500.000	45.22	0.00	129.99	0.01	0.00	0.59	0.02
18500.000	46.85	0.00	301.10	1.46	0.00	1.01	0.11
18500.000	47.46	0.13	375.96	8.91	0.05	1.14	0.15
18500.000	49.37	13.56	719.53	51.89	0.18	1.69	0.27
19750.000	45.54	0.32	389.68	0.00	0.24	3.44	0.00
19750.000	47.31	13.35	766.65	0.00	0.71	4.51	0.00
19750.000	47.98	26.46	991.52	0.00	0.93	5.73	0.00
19750.000	50.04	246.67	1579.33	0.00	1.21	7.00	0.00
19770.000	45.56	0.03	389.97	0.00	0.15	3.74	0.00
19770.000	47.34	3.39	770.67	0.00	0.70	5.24	0.00
19770.000	48.01	22.19	997.81	0.00	0.93	6.69	0.00
19770.000	50.04	184.27	1635.73	0.00	1.24	7.81	0.00
19800.000	45.62	0.00	396.00	0.00	0.00	4.65	0.00
19800.000	47.41	1.48	773.52	0.00	0.60	5.56	0.00
19800.000	48.10	17.20	1002.80	0.00	0.93	6.44	0.00
19800.000	50.10	142.95	1877.05	0.00	1.28	8.13	0.00
21900.000	54.72	21.01	255.72	83.27	1.13	5.24	1.14
21900.000	56.13	64.84	395.11	260.06	1.41	5.32	1.43
21900.000	56.88	92.64	469.43	377.93	1.48	5.34	1.51
21900.000	58.78	186.46	709.22	774.32	1.67	5.81	1.74

SECNO	CWSEL	QLOB	QCH	QROB	VLOB	VCH	VROB
22384.000	60.30	14.48	286.54	58.97	1.26	6.95	1.30
* 22384.000	61.04	49.55	475.50	194.95	2.02	8.69	2.04
* 22384.000	61.34	71.77	586.43	261.80	2.34	9.77	2.34
* 22384.000	62.26	153.25	899.74	617.00	3.14	11.74	3.19
* 22434.000	62.67	0.00	360.00	0.00	0.00	11.35	0.00
* 22434.000	64.99	0.00	720.00	0.00	0.00	14.31	0.00
* 22434.000	66.10	0.00	940.00	0.00	0.00	15.88	0.00
* 22434.000	66.66	1197.65	472.35	0.00	2.34	7.42	0.00
22527.000	63.25	0.00	360.00	0.00	0.00	10.84	0.00
* 22527.000	65.69	0.00	720.00	0.00	0.00	13.65	0.00
* 22527.000	69.84	0.00	940.00	0.00	0.00	10.94	0.00
22527.000	80.10	1453.12	216.88	0.00	0.52	1.29	0.00
22580.000	65.47	136.21	147.93	75.87	0.41	1.57	0.32
22580.000	69.17	288.78	175.73	255.49	0.35	1.12	0.32
22580.000	72.07	380.38	189.84	369.78	0.30	0.42	0.29
22580.000	80.11	707.46	258.24	708.30	0.25	0.74	0.26
22680.000	65.50	138.24	137.34	84.41	0.37	1.37	0.29
22680.000	69.18	289.20	171.36	259.44	0.33	1.05	0.31
22680.000	72.07	381.26	186.70	372.04	0.29	0.88	0.28
22680.000	80.11	708.64	252.56	708.80	0.25	0.73	0.25

GRAULEVY BR WELDON NC

SUMMARY PRINTOUT

SEANO	CWSEL	SSTA	STCHL	STCHR	ENDSI	TOPRID
12200.000	41.80	984.82	987.00	1053.00	1045.93	61.11
12200.000	42.90	980.04	987.00	1053.00	1062.40	82.36
12200.000	43.50	977.42	987.00	1053.00	1090.60	113.18
12200.000	45.00	970.89	987.00	1053.00	1210.00	239.11
12210.000	41.02	984.74	987.00	1053.00	1046.07	61.33
12210.000	42.92	979.95	987.00	1053.00	1063.33	83.36
12210.000	43.52	977.35	987.00	1053.00	1091.44	114.10
12210.000	45.02	970.81	987.00	1053.00	1211.87	241.06
12230.000	41.86	984.59	987.00	1053.00	1046.36	61.77
12230.000	42.96	979.77	987.00	1053.00	1065.25	85.46
12230.000	43.56	977.18	987.00	1053.00	1093.20	116.02
12230.000	45.06	970.64	987.00	1053.00	1215.87	245.24
12260.000	41.91	984.79	987.00	1053.00	1045.98	61.19
12260.000	43.02	979.45	987.00	1053.00	1063.33	83.36
12260.000	43.61	977.36	987.00	1053.00	1091.08	113.70
12260.000	45.12	970.81	987.00	1053.00	1211.86	241.04
12780.000	42.52	982.58	987.00	1053.00	1049.98	67.39
12780.000	43.74	977.28	987.00	1053.00	1092.15	114.67
12780.000	44.32	974.74	987.00	1053.00	1126.09	151.36
12780.000	45.92	967.77	987.00	1053.00	1289.61	321.63
14110.000	44.44	984.96	975.00	1010.00	1090.32	120.33
14110.000	45.02	852.56	975.00	1010.00	1108.42	255.64
14110.000	46.14	825.88	975.00	1010.00	1114.56	284.66
14110.000	47.74	761.83	975.00	1010.00	1133.44	371.61
18500.000	45.22	981.27	980.00	1030.00	1034.33	53.05
18500.000	46.85	980.11	980.00	1030.00	1066.91	86.80
18500.000	47.46	967.79	980.00	1030.00	1079.16	111.30
18500.000	49.37	916.63	980.00	1030.00	1117.52	200.89
19750.000	45.54	986.87	985.00	1015.00	1008.78	27.91
19750.000	47.31	965.43	985.00	1015.00	1009.71	40.26
19750.000	47.98	965.10	985.00	1015.00	1010.05	44.95
19750.000	50.04	853.56	985.00	1015.00	1011.65	158.09
19770.000	45.56	983.33	985.00	1015.00	1008.56	25.25
19770.000	47.34	971.84	985.00	1015.00	1009.51	37.67
19770.000	48.01	967.07	985.00	1015.00	1009.85	42.00
19770.000	50.00	867.09	985.00	1015.00	1010.92	143.82
19800.000	45.62	985.17	985.00	1015.00	1008.41	23.24
19800.000	47.41	973.92	985.00	1015.00	1009.34	35.42
19800.000	48.10	965.54	985.00	1015.00	1009.70	40.16
19800.000	50.10	878.22	985.00	1015.00	1010.74	132.52
21900.000	54.72	972.33	990.00	1008.00	1075.98	103.44
21900.000	56.13	968.82	990.00	1008.00	1093.41	124.59
21900.000	56.86	966.82	990.00	1008.00	1101.16	134.35
21900.000	58.78	961.83	990.00	1008.00	1120.48	158.64

SECNO	CWSEL	SSTA	SICHL	SICHR	ENDSI	TOPWID
* 22384.000	60.30	973.64	990.00	1008.00	1070.22	96.58
* 22384.000	61.04	971.67	990.00	1008.00	1080.42	108.75
* 22384.000	61.34	970.89	990.00	1008.00	1084.46	113.56
* 22384.000	62.26	968.47	990.00	1008.00	1094.76	126.30
* 22434.000	62.67	996.00	996.00	1004.00	1004.00	8.00
* 22434.000	64.99	996.00	996.00	1004.00	1004.00	8.00
* 22434.000	66.10	996.00	996.00	1004.00	1004.00	8.00
* 22434.000	66.66	860.82	996.00	1004.00	1004.00	143.18
* 22527.000	63.25	996.00	996.00	1004.00	1004.00	8.00
* 22527.000	65.69	996.00	996.00	1004.00	1004.00	8.00
* 22527.000	69.84	996.00	996.00	1004.00	1004.00	8.00
* 22527.000	80.10	781.37	996.00	1004.00	1004.00	222.63
22580.000	65.47	870.69	994.00	1011.00	1152.40	281.72
22580.000	69.17	847.98	994.00	1011.00	1172.06	324.08
22580.000	72.07	830.19	994.00	1011.00	1192.69	361.90
22580.000	80.11	782.88	994.00	1011.00	1195.00	412.12
22680.000	65.50	866.65	994.00	1011.00	1154.57	285.92
22680.000	69.18	846.07	994.00	1011.00	1173.68	327.61
22680.000	72.07	828.39	994.00	1011.00	1194.77	366.38
22680.000	80.11	781.10	994.00	1011.00	1195.00	413.90

SECNO	XLCH	ELTRD	ELLC	ELMIN	U	CWSEL	CHWS	EG	10KAS	VCH	AREA	QIK
12200.000	0.00	0.00	0.00	38.80	190.00	41.80	0.00	41.86	18.00	1.95	97.78	44.73
12200.000	0.00	0.00	0.00	38.80	455.00	42.90	0.00	43.01	19.77	2.71	173.16	102.53
12200.000	0.00	0.00	0.00	38.80	625.00	43.50	0.00	43.64	17.96	2.98	231.82	147.50
12200.000	0.00	0.00	0.00	38.80	1320.00	45.00	0.00	45.22	18.71	3.95	480.15	305.15
12210.000	10.00	0.00	0.00	38.80	190.00	41.82	0.00	41.88	17.45	1.93	98.88	45.48
12210.000	10.00	0.00	0.00	38.80	455.00	42.92	0.00	43.03	19.26	2.69	174.80	103.69
12210.000	10.00	0.00	0.00	38.80	625.00	43.52	0.00	43.65	17.60	2.96	232.86	148.98
12210.000	10.00	0.00	0.00	38.80	1320.00	45.02	0.00	45.24	18.42	3.93	484.64	307.56
12230.000	20.00	0.00	0.00	38.80	190.00	41.86	0.00	41.91	16.33	1.89	101.14	47.02
12230.000	20.00	0.00	0.00	38.80	455.00	42.96	0.00	43.07	18.24	2.63	178.26	106.53
12230.000	20.00	0.00	0.00	38.80	625.00	43.56	0.00	43.69	18.88	2.93	238.17	152.10
12230.000	20.00	0.00	0.00	38.80	1320.00	45.06	0.00	45.28	17.81	3.89	494.37	312.76
12260.000	30.00	0.00	0.00	38.90	190.00	41.91	0.00	41.96	17.82	1.94	98.79	45.01
12260.000	30.00	0.00	0.00	38.90	455.00	43.02	0.00	43.13	19.26	2.69	174.80	103.69
12260.000	30.00	0.00	0.00	38.90	625.00	43.61	0.00	43.74	17.75	2.97	232.94	148.55
12260.000	30.00	0.00	0.00	38.90	1320.00	45.12	0.00	45.34	18.42	3.93	484.60	307.54
12780.000	520.00	0.00	0.00	39.00	190.00	42.52	0.00	42.55	7.73	1.47	130.87	68.54
12780.000	520.00	0.00	0.00	39.00	455.00	43.74	0.00	43.81	9.17	2.15	235.58	150.23
12780.000	520.00	0.00	0.00	39.00	625.00	44.32	0.00	44.41	9.39	2.43	312.85	203.92
12780.000	520.00	0.00	0.00	39.00	1320.00	45.92	0.00	46.06	10.63	3.26	679.61	404.65
14110.000	1850.00	0.00	0.00	41.50	170.00	44.44	0.00	44.48	15.32	1.89	154.83	43.43
14110.000	1850.00	0.00	0.00	41.50	410.00	45.62	0.00	45.67	11.17	2.26	295.44	122.68
14110.000	1850.00	0.00	0.00	41.50	550.00	46.14	0.00	46.19	9.79	2.36	536.53	175.79
14110.000	1850.00	0.00	0.00	41.50	1160.00	47.74	0.00	47.80	8.02	2.75	1064.20	409.70
18500.000	4390.00	0.00	0.00	38.50	130.00	45.22	0.00	45.22	0.48	0.59	219.42	187.07
18500.000	4390.00	0.00	0.00	38.50	305.00	46.85	0.00	46.86	0.55	1.01	333.33	312.43
18500.000	4390.00	0.00	0.00	38.50	385.00	47.46	0.00	47.48	1.08	1.14	393.09	376.65
18500.000	4390.00	0.00	0.00	38.50	785.00	49.37	0.00	49.42	1.69	1.69	692.61	604.24
19750.000	1250.00	0.00	0.00	38.20	390.00	45.54	0.00	45.72	17.99	3.44	114.55	91.94
19750.000	1250.00	0.00	0.00	38.20	780.00	47.31	0.00	47.68	26.00	4.91	175.01	152.96
19750.000	1250.00	0.00	0.00	38.20	1020.00	47.98	0.00	48.48	32.01	5.73	203.60	180.29
19750.000	1250.00	0.00	0.00	38.20	1820.00	50.04	0.00	50.71	37.28	7.00	425.32	298.07
19770.000	20.00	0.00	0.00	38.60	390.00	45.56	0.00	45.78	23.32	3.74	104.39	80.76
19770.000	20.00	0.00	0.00	38.60	780.00	47.34	0.00	47.76	31.58	5.24	166.45	138.79
19770.000	20.00	0.00	0.00	38.60	1020.00	48.01	0.00	48.58	38.20	6.09	187.57	165.03
19770.000	20.00	0.00	0.00	38.60	1820.00	50.04	0.00	50.85	45.41	7.61	364.05	270.09
19800.000	30.00	0.00	0.00	39.00	390.00	45.62	0.00	45.87	29.55	4.05	96.29	71.75
19800.000	30.00	0.00	0.00	39.00	780.00	47.41	0.00	47.88	37.65	5.56	148.64	127.11
19800.000	30.00	0.00	0.00	39.00	1020.00	48.10	0.00	48.73	44.86	6.44	174.32	152.50
19800.000	30.00	0.00	0.00	39.00	1820.00	50.10	0.00	51.05	53.50	8.13	317.93	247.90
21900.000	2100.00	0.00	0.00	51.30	360.00	54.72	54.30	55.02	73.50	5.24	140.23	41.99
21900.000	2100.00	0.00	0.00	51.30	720.00	56.13	0.00	56.39	43.42	5.32	301.97	109.26
21900.000	2100.00	0.00	0.00	51.30	940.00	56.88	0.00	57.12	54.87	5.34	400.42	159.18
21900.000	2100.00	0.00	0.00	51.30	1670.00	58.78	0.00	59.03	26.72	5.81	677.70	323.10

SECNO	KLCH	ELTRD	ELIC	ELMIN	R	CASEL	CRHS	EG	10K+S	VCH	AREA	.01K
* 22384.000	484.00	0.00	0.00	57.30	360.00	60.30	60.30	60.90	162.16	6.95	98.02	28.27
* 22384.000	484.00	0.00	0.00	57.30	720.00	61.04	61.04	61.84	174.06	8.69	174.84	54.57
* 22384.000	484.00	0.00	0.00	57.30	940.00	61.34	61.34	62.30	194.25	9.77	207.71	67.45
* 22384.000	484.00	0.00	0.00	57.30	1670.00	62.26	62.26	63.49	202.58	11.74	318.64	117.33
* 22434.000	50.00	0.00	0.00	58.70	360.00	62.67	62.67	64.67	367.59	11.35	31.71	18.78
* 22434.000	50.00	0.00	0.00	58.70	720.00	64.99	64.99	68.17	379.03	14.31	50.32	36.98
* 22434.000	50.00	0.00	0.00	58.70	940.00	66.10	66.16	70.02	406.88	15.88	59.20	46.60
* 22434.000	50.00	0.00	0.00	58.70	1670.00	66.66	66.66	66.97	52.43	7.42	574.75	218.47
* 22527.000	93.00	78.60	66.90	59.10	360.00	63.29	0.00	63.08	320.02	10.84	33.21	20.12
* 22527.000	93.00	78.60	66.90	59.10	720.00	65.69	0.00	68.59	331.47	13.65	52.73	34.55
* 22527.000	93.00	78.60	66.90	59.10	940.00	69.84	0.00	71.70	145.59	10.94	85.91	77.90
* 22527.000	93.00	78.60	66.90	59.10	1670.00	80.10	0.00	80.11	0.49	1.29	2958.11	2397.82
22580.000	53.00	0.00	0.00	58.60	360.00	65.47	0.00	65.49	2.84	1.57	665.62	213.79
22580.000	53.00	0.00	0.00	58.60	720.00	69.17	0.00	69.18	0.73	1.12	1787.11	843.42
22580.000	53.00	0.00	0.00	58.60	940.00	72.07	0.00	72.07	0.34	0.92	2777.48	1605.64
22580.000	53.00	0.00	0.00	58.60	1670.00	80.11	0.00	80.11	0.11	0.74	5900.46	4967.04
22680.000	100.00	0.00	0.00	58.30	360.00	65.50	0.00	65.51	2.01	1.37	759.85	253.66
22680.000	100.00	0.00	0.00	58.30	720.00	69.18	0.00	69.19	0.62	1.05	1888.50	913.94
22680.000	100.00	0.00	0.00	58.30	940.00	72.07	0.00	72.08	0.31	0.88	2888.09	1701.26
22680.000	100.00	0.00	0.00	58.30	1670.00	80.11	0.00	80.11	0.11	0.73	6025.60	5125.74

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CKSEL	DIFWSP	DIFWSX	DIFKWS	TUPWID	XLCH
12200.000	190.00	41.80	0.00	0.00	0.00	61.11	0.00
12200.000	455.00	42.90	1.10	0.00	0.00	82.36	0.00
12200.000	625.00	43.50	0.60	0.00	0.00	113.18	0.00
12200.000	1320.00	45.00	1.50	0.00	0.00	239.11	0.00
12210.000	190.00	41.82	0.00	0.02	0.00	61.33	10.00
12210.000	455.00	42.92	1.10	0.02	0.00	83.38	10.00
12210.000	625.00	43.52	0.60	0.02	0.00	114.10	10.00
12210.000	1320.00	45.02	1.50	0.02	0.00	241.06	10.00
12230.000	190.00	41.86	0.00	0.04	0.00	61.77	20.00
12230.000	455.00	42.96	1.11	0.04	0.00	85.48	20.00
12230.000	625.00	43.56	0.60	0.04	0.00	116.02	20.00
12230.000	1320.00	45.06	1.51	0.04	0.00	245.24	20.00
12260.000	190.00	41.91	0.00	0.05	0.00	61.19	30.00
12260.000	455.00	43.02	1.11	0.05	0.00	83.38	30.00
12260.000	625.00	43.61	0.59	0.05	0.00	113.70	30.00
12260.000	1320.00	45.12	1.51	0.05	0.00	241.04	30.00
12780.000	190.00	42.52	0.00	0.61	0.00	67.39	520.00
12780.000	455.00	43.74	1.22	0.72	0.00	114.87	520.00
12780.000	625.00	44.32	0.58	0.71	0.00	151.36	520.00
12780.000	1320.00	45.92	1.60	0.80	0.00	321.83	520.00
14110.000	170.00	44.44	0.00	1.92	0.00	120.33	1850.00
14110.000	410.00	45.62	1.19	1.89	0.00	255.84	1850.00
14110.000	550.00	46.14	0.52	1.82	0.00	284.68	1850.00
14110.000	1160.00	47.74	1.60	1.83	0.00	371.61	1850.00
18500.000	130.00	45.22	0.00	0.78	0.00	53.05	4390.00
18500.000	305.00	46.85	1.63	1.22	0.00	86.80	4390.00
18500.000	385.00	47.46	0.61	1.32	0.00	111.36	4390.00
18500.000	785.00	49.37	1.92	1.63	0.00	200.89	4390.00
19750.000	390.00	45.54	0.00	0.32	0.00	27.91	1250.00
19750.000	780.00	47.31	1.77	0.47	0.00	40.28	1250.00
19750.000	1020.00	47.98	0.67	0.53	0.00	44.95	1250.00
19750.000	1820.00	50.04	2.06	0.67	0.00	158.09	1250.00
19770.000	390.00	45.56	0.00	0.02	0.00	25.25	20.00
19770.000	780.00	47.34	1.78	0.02	0.00	37.67	20.00
19770.000	1020.00	48.01	0.68	0.03	0.00	42.40	20.00
19770.000	1820.00	50.04	2.02	-0.01	0.00	143.82	20.00
19800.000	390.00	45.62	0.00	0.06	0.00	23.24	30.00
19800.000	780.00	47.41	1.79	0.07	0.00	35.42	30.00
19800.000	1020.00	48.10	0.69	0.08	0.00	40.16	30.00
19800.000	1820.00	50.10	2.01	0.07	0.00	132.52	30.00
21900.000	360.00	54.72	0.00	9.10	0.00	103.44	2100.00
21900.000	720.00	56.13	1.41	8.72	0.00	124.59	2100.00
21900.000	940.00	56.88	0.75	8.79	0.00	134.35	2100.00
21900.000	1670.00	58.78	1.90	8.68	0.00	158.64	2100.00

SECNO	Q	CASEI	DIEWSP	DIEWSX	DIEKKS	TOPWID	XLCH
22384.000	360.00	60.30	0.00	5.58	0.00	96.58	484.00
22384.000	720.00	61.04	0.75	4.91	0.00	102.75	484.00
22384.000	940.00	61.34	0.30	4.46	0.00	114.56	484.00
22384.000	1670.00	62.26	0.92	3.48	0.00	126.30	484.00
22434.000	360.00	62.67	0.00	2.37	0.00	8.00	50.00
22434.000	720.00	64.94	2.35	3.95	0.00	8.00	50.00
22434.000	940.00	66.10	1.11	4.76	0.00	8.00	50.00
22434.000	1670.00	66.66	0.50	4.40	0.00	143.16	50.00
22527.000	360.00	63.25	0.00	0.59	0.00	8.00	92.00
22527.000	720.00	65.64	2.34	0.76	0.00	8.00	92.00
22527.000	940.00	69.64	4.14	1.74	0.00	8.00	92.00
22527.000	1670.00	80.10	10.27	15.48	0.00	222.13	92.00
22580.000	360.00	65.47	0.00	2.22	0.00	201.72	52.00
22580.000	720.00	69.17	3.70	3.06	0.00	324.08	52.00
22580.000	940.00	72.07	2.90	2.23	0.00	461.96	52.00
22580.000	1670.00	80.11	8.04	8.01	0.00	412.12	52.00
22680.000	360.00	65.50	0.00	0.03	0.00	282.92	100.00
22680.000	720.00	65.10	3.68	0.03	0.00	327.81	100.00
22680.000	940.00	72.07	2.04	0.00	0.00	366.36	100.00
22680.000	1670.00	80.11	8.04	0.00	0.00	413.90	100.00

SUMMARY OF ERRORS

CAUTION	SECNO=22384.000	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22384.000	PROFILE= 1	MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22384.000	PROFILE= 2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22384.000	PROFILE= 2	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22384.000	PROFILE= 2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22384.000	PROFILE= 3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22384.000	PROFILE= 3	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22384.000	PROFILE= 3	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22384.000	PROFILE= 4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22384.000	PROFILE= 4	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22384.000	PROFILE= 4	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22434.000	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22434.000	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22434.000	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22434.000	PROFILE= 2	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22434.000	PROFILE= 2	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22434.000	PROFILE= 2	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22434.000	PROFILE= 3	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22434.000	PROFILE= 3	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22434.000	PROFILE= 3	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22434.000	PROFILE= 4	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=22434.000	PROFILE= 4	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=22434.000	PROFILE= 4	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=22527.000	PROFILE= 1	HYDRAULIC JUMP O.S.
CAUTION	SECNO=22527.000	PROFILE= 2	HYDRAULIC JUMP O.S.
CAUTION	SECNO=22527.000	PROFILE= 3	HYDRAULIC JUMP O.S.

FLOOD INSURANCE ZONE DATA FOR GRAULEVY BR WELDON NC

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND I		
		10%	2%	0.2%
12200.000	0.	-1.70	-0.60	1.50
12210.000	10.	-1.70	-0.60	1.50
12230.000	30.	-1.70	-0.60	1.51
12260.000	60.	-1.70	-0.59	1.51
12780.000	580.	-1.60	-0.58	1.60
14110.000	2430.	-1.70	-0.52	1.60
18500.000	6820.	-2.24	-0.61	1.92
19750.000	8070.	-2.44	-0.67	2.06
19770.000	8090.	-2.45	-0.68	2.02
19800.000	8120.	-2.48	-0.69	2.01
21900.000	10220.	-2.17	-0.75	1.90
22384.000	10704.	-1.04	-0.30	0.92
22434.000	10754.	-3.44	-1.11	0.56
22527.000	10847.	-6.58	-4.14	10.27
22580.000	10900.	-6.60	-2.90	8.04
22680.000	11000.	-6.57	-2.89	8.04

WEIGHTED AVG FOR REACH -2.11 -0.65 1.89

FHF FOR THE REACH = 020 WITH 97.81 OF THE REACH WITHIN 1.0 FEET
 ZONE FOR THE REACH = A 4

FLOODWAY DATA, GRAULEVY BR WELDON NC
 PROFILE NO. 2

STATION	FLOODWAY			WATER SURFACE ELEVATION		
	WIDTH (FT)	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
12200.000	80.	277.	2.5	44.2	43.5	0.7
12210.000	80.	278.	2.2	44.2	43.5	0.7
12230.000	80.	279.	2.2	44.3	43.6	0.7
12260.000	80.	274.	2.3	44.2	43.6	0.6
12780.000	80.	301.	2.1	44.7	44.3	0.4
14110.000	70.	255.	2.2	46.4	46.1	0.3
16500.000	70.	385.	1.0	47.9	47.5	0.4
19750.000	35.	207.	4.9	48.3	48.0	0.3
19770.000	35.	194.	5.2	48.3	48.0	0.3
19800.000	35.	183.	5.6	48.4	48.1	0.3
21900.000	50.	226.	4.2	57.5	56.9	0.6
22380.000	50.	139.	6.8	61.8	61.3	0.5
22434.000	8.	60.	15.8	66.1	66.1	0.0
22527.000	8.	67.	10.9	69.9	69.8	0.1
22580.000	95.	936.	1.0	72.1	72.1	0.0
22680.000	95.	966.	1.0	72.1	72.1	0.0

 HEC2 RELEASE DATED NOV 76 UPDATED AUG 77
 ERROR CORR - 01,02
 MODIFICATION - 50,51,52,53

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATED MESSAGE IN SUMMARY OF ERRORS LIST

GRAULEVY DR WELDON NC

SUMMARY PRINTOUT

SECO	CSLL	EG	ELMID	ELLC	10K*5	W
12200.000	43.50	43.64	38.80	0.00	17.96	625.00
12200.000	44.20	44.29	38.80	0.00	9.09	625.00
12210.000	43.52	43.65	38.80	0.00	17.60	625.00
12210.000	44.21	44.30	38.80	0.00	9.02	625.00
12230.000	43.56	43.69	38.80	0.00	16.86	625.00
12230.000	44.23	44.32	38.80	0.00	8.87	625.00
12260.000	43.61	43.74	38.90	0.00	17.75	625.00
12260.000	44.25	44.35	38.90	0.00	9.46	625.00
12780.000	44.32	44.41	39.00	0.00	9.39	625.00
12780.000	44.70	44.77	39.00	0.00	7.07	625.00
14110.000	46.14	46.19	41.50	0.00	9.79	550.00
14110.000	46.48	46.61	41.50	0.00	15.46	550.00
18500.000	47.46	47.48	38.50	0.00	1.06	365.00
18500.000	47.69	47.91	38.50	0.00	6.89	365.00
19750.000	47.98	48.46	38.20	0.00	32.01	1020.00
19750.000	48.31	48.76	38.20	0.00	27.81	1020.00
19770.000	48.01	48.58	38.60	0.00	38.20	1020.00
19770.000	48.34	48.84	38.60	0.00	32.90	1020.00
19800.000	48.10	48.73	39.00	0.00	44.86	1020.00
19800.000	48.41	48.97	39.00	0.00	38.27	1020.00
21900.000	56.88	57.12	51.30	0.00	54.67	940.00
21900.000	57.52	58.09	51.30	0.00	50.22	940.00
* 22384.000	61.34	62.30	57.30	0.00	194.25	940.00
* 22384.000	61.79	63.26	57.30	0.00	202.27	940.00
* 22434.000	66.10	70.02	58.70	0.00	406.86	940.00
* 22434.000	66.15	70.01	58.70	0.00	399.36	940.00

SECNO	CWSEL	EG	ELMIN	ELLC	10K+S	G
* 22527.000	69.84	71.70	59.10	66.90	145.59	940.00
* 22527.000	69.91	71.75	59.10	66.90	142.91	940.00
22580.000	72.07	72.07	58.60	0.00	0.34	940.00
22580.000	72.10	72.14	58.60	0.00	1.91	940.00
22680.000	72.07	72.08	58.30	0.00	0.31	940.00
22680.000	72.12	72.16	58.30	0.00	1.74	940.00

GRAULEVY BR WELDON NC

SUMMARY PRINTOUT

SECNO	CWSEL	SS1A	STCHL	STCRK	ENOST	TOPWLB
12200.000	43.50	977.42	987.00	1055.00	1096.60	115.18
12200.000	44.20	980.00	987.00	1055.00	1060.00	80.00
12210.000	43.52	977.35	987.00	1055.00	1091.44	114.10
12210.000	44.21	980.00	987.00	1055.00	1060.00	80.00
12230.000	43.56	977.16	987.00	1055.00	1093.20	116.62
12230.000	44.23	980.00	987.00	1055.00	1060.00	80.00
12260.000	43.60	977.36	987.00	1055.00	1091.60	113.70
12260.000	44.25	980.00	987.00	1055.00	1060.00	80.00
12700.000	44.52	974.74	987.00	1055.00	1122.09	151.50
12700.000	44.70	980.00	987.00	1055.00	1060.00	80.00
14110.000	46.14	829.86	975.00	1010.00	1114.56	224.86
14110.000	46.48	970.00	975.00	1010.00	1040.00	70.00
18500.000	47.46	967.79	980.00	1050.00	1079.10	111.56
18500.000	47.89	970.00	980.00	1050.00	1040.00	70.00
19750.000	47.96	965.10	985.00	1015.00	1010.65	64.95
19750.000	48.51	975.00	985.00	1015.00	1010.00	55.00
19770.000	48.01	967.47	985.00	1015.00	1009.66	42.46
19770.000	48.54	975.00	985.00	1015.00	1010.00	55.00
19800.000	48.10	969.54	985.00	1015.00	1009.70	46.70
19800.000	48.41	975.00	985.00	1015.00	1009.00	54.00
21900.000	56.82	966.82	990.00	1000.00	1101.16	134.35
21900.000	57.52	974.00	990.00	1000.00	1024.00	50.00
* 22384.000	61.34	970.09	990.00	1000.00	1084.46	113.36
* 22384.000	61.79	974.00	990.00	1000.00	1024.00	50.00
* 22454.000	66.10	990.00	996.00	1004.00	1004.00	0.00
* 22454.000	66.15	996.00	996.00	1004.00	1004.00	0.00
* 22527.000	69.64	996.00	996.00	1004.00	1004.00	0.00
* 22527.000	69.91	996.00	996.00	1004.00	1004.00	0.00
22580.000	72.07	836.19	994.00	1011.00	1192.09	361.90
22580.000	72.10	930.00	994.00	1011.00	1025.00	95.00
22600.000	72.07	828.39	994.00	1011.00	1194.77	366.38
22600.000	72.12	930.00	994.00	1011.00	1025.00	95.00

SUMMARY OF ERRORS

CAUTION SECNO=22384.000 PROFILE= 1 CRITICAL DEPTH ASSUMED.
CAUTION SECNO=22384.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY